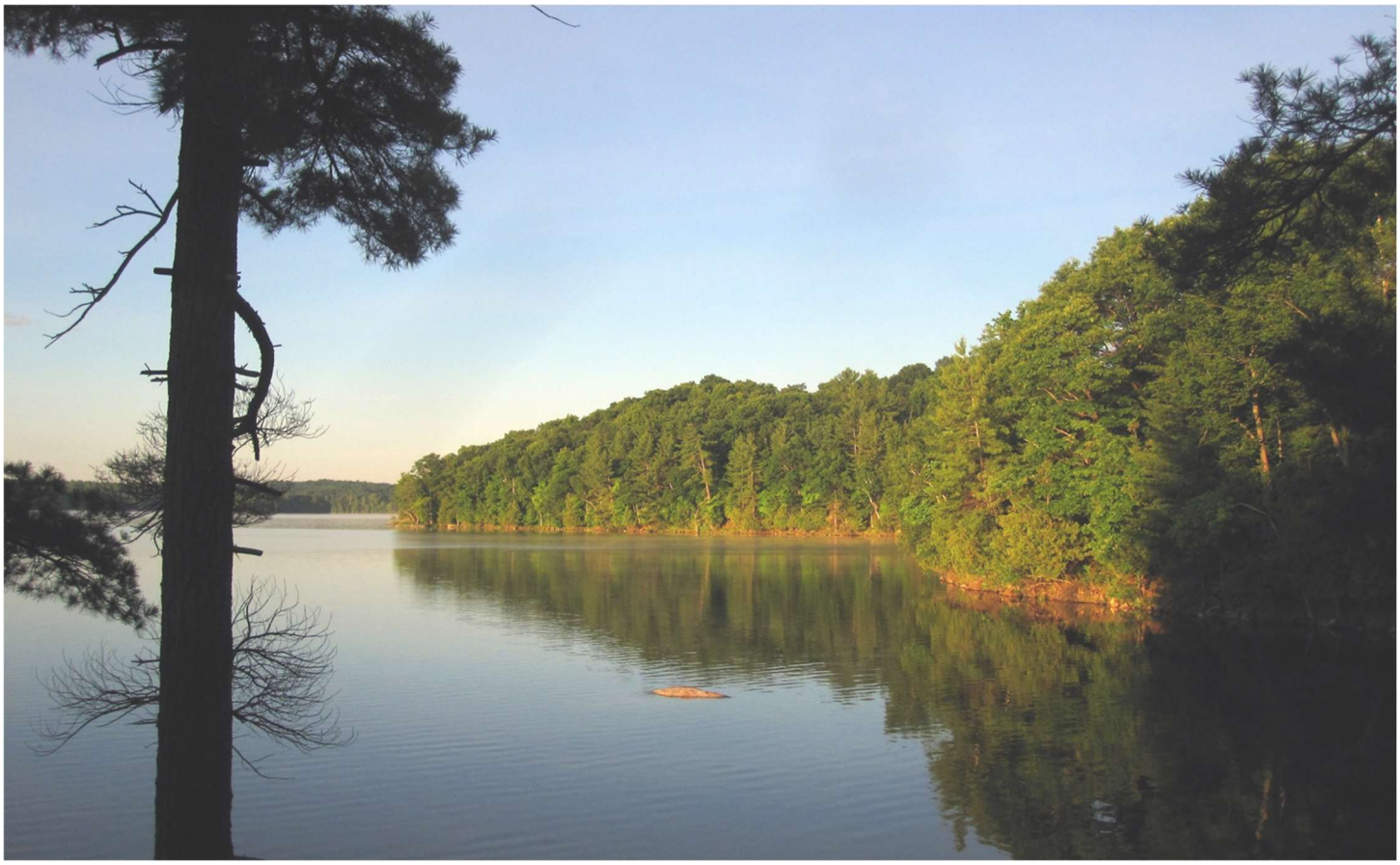

OUR WATER QUALITY REMAINS EXCELLENT

By Gord Moore

If you were fortunate enough to go out on the lake last summer, you might have seen Gord Moore out on his pontoon boat, busy taking water samples. With the Association's big banners on both sides, it would have been hard to miss him. As the new water quality director, Gord is now responsible for frequent sampling of our lake water. Here are his 2020 findings.

Before COVID-19, the Wolfe Lake Association Westport, the provincial Ministry of the Environment, and the Federation of Ontario Cottagers' Associations performed different types of water-quality testing throughout the year. This testing has been ongoing for over 20 years. Our association has always been involved. Last year was different.

Gord Moore: "Well, another year has come and gone, and what a year it has been. COVID-19 affected all our lives in so many ways, ways, including water-quality testing on Wolfe Lake."

"It started on April 9th with an email from the Rideau Valley Conservation Authority (RVCA) informing us that, due to the pandemic, all water-quality testing would be suspended until further notice. On May 29th I received a follow-up email that RVCA would be resuming testing within their catchment area on a limited basis, starting June 3rd, but with many changes. Firstly, volunteer transportation such as I had been providing, i.e., taking RVCA employees out on my pontoon boat to test various locations on Wolfe Lake, was to be discontinued for the time being. Secondly, due to the novel virus, they were unable to employ the same number of summer students. As a result, they had to prioritize which lakes to visit and how often. The decision was based on nutrient status, water bodies with identified issues, as well as lakes identified as 'lake trout lakes'. As Wolfe Lake had no nutrient issues or identified major issues at all and is not classed as a 'lake trout lake', RVCA made only one visit to our waters during the summer season of 2020, on July 7th."

Gord goes on to clarify that, under normal circumstances, he would go out with their team each month, on average for 4 hours per visit, and take samples at all the regular locations. “This time, because of restrictions due to COVID-19 and their smaller boat, they were able to visit just 6 sampling sites.” Our lake association is involved in the ‘Lake Partner Program’, run by the Provincial Ministry of the Environment, Conservation and Parks (MECP) in cooperation with citizens, usually dedicated volunteers from lake associations around the province. Gord: “As part of this partnership, I actually did the water testing myself once a month and sent off the samples to their lab for evaluation. But early in the season the Ministry informed all participants that water testing for 2020 had been suspended, not because of concerns about sampling but rather because of concerns for the safety of government employees in the lab during the current pandemic. And at the end of the season, I received a follow-up email to the effect that we could send in a sample for October if we wanted to, but, unfortunately, by that time my boat was in storage.”

2020 SAMPLING SUMMARY

WOLFE LAKE | WATER QUALITY | 2020

Date (Sampling)	Sampling locations	E. coli (CFU/100ml)	TKN (µg/l)	TP (µg/l)	Secchi (m)
7-Jul-20	J	8	400	9	
7-Jul-20	D	0	300	6	
7-Jul-20	DP3		300	9	5.5
7-Jul-20	DP1		300	8	6
7-Jul-20	I	0	400	10	
7-Jul-20	K	2	400	12	

Total Phosphorus (TP) and Total Nitrogen (TKN) are two of the main indicators of water pollution due to runoff from lake-surrounding areas.

The concentration of E. coli bacteria is another important indicator of water contamination from fecal material of human or animal origin. The measured Secchi depth reflects the turbidity of the water caused by algae, pollen and sediments. All measured concentrations are far lower than the standards. Water clarity continues to decrease as compared with previous years. Total phosphorus concentration remains low, comparable to previous years. Overall results were very comparable to the period on record. In general, the water quality on Wolfe Lake remains excellent. E. coli concentrations were far below the provincial maximum values. Water clarity, as expressed by the annual average Secchi depth, has decreased in the last few years. This trend was also noted in 2020. A probable cause for the decrease in water clarity over the last few years may be the rapid decline in the Zebra Mussel population over the same time period. Zebra Mussels feed on phytoplankton, which they find in the lake at shallower depths. When large numbers feed in these shallower depths, the result can be improved water clarity, as we saw when the Zebra Mussels were at their worst. With the decline in numbers, Zebra Mussels are not feeding on the phytoplankton to the same extent, and it is thought that this may be the cause of the reduction in water clarity.